

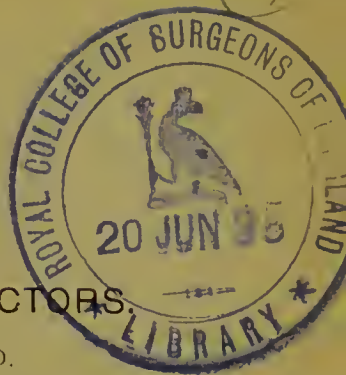
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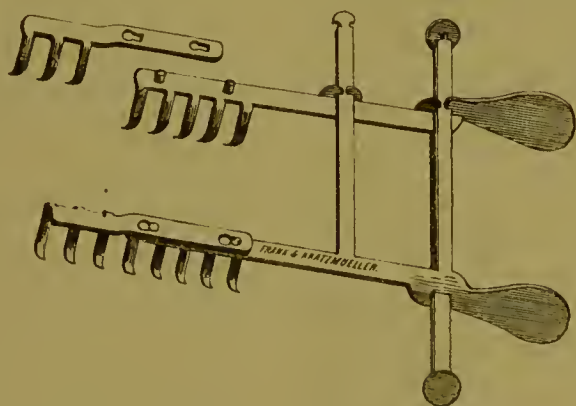
IMPROVED DOUBLE RETRACTORS.

BY SETH SCOTT BISHOP, M. D.

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These retractors are an improvement on those that I introduced at the San Francisco meeting of the American Medical Association. They are constructed on somewhat different principles, and are cheaper to make, costing only about one-half as much as the others.

The hooks are separated with the same device that is used in the French mouth gags; but I have discarded the spiral spring,



since it is unnecessary, and simplicity and efficiency constitute the best tests of a perfect instrument.

In operations, the retractor should be introduced into the incision with the hooks interlocked. They are then separated by pressing the thumb and finger on the opposite ends of the sliding parallel bars next to the handles. When the lips of the wound have been forced as far apart as may be desired, the hooks will remain in that position after the pressure of the thumb and finger is discontinued. This effect is accomplished by means of a ratchet edge on one of the bars articulating with a corresponding incisor on the shaft.

When the hooks are to be removed they may be made to collapse in a twinkling by pressing the thumb and finger on the handles. This pressure will unlock the ratch and interlock the hooks again. They are quick to introduce, and open or close. There are no screws to work, and no nuts to lose. The hooks are made so wide that nearly one-half the bleeding edges of the wound are pressed upon, and the other half so stretched as to reduce the hemorrhage to the least possible amount. One assistant less is needed, and more room is gained for the operator.

Two forms of these retractors are manufactured; one with five hooks only, and the other with three additional hooks that can be easily added to the five on each side by slipping their slots over the corresponding pins on the hook shanks. These adjustable hooks make the retractors long enough for other than mastoid operations. They will separate to any distance within two inches. They are aseptic, strong, easily managed, quickly adjusted, simply and cheaply constructed, and elegantly finished, by Frank & Kratzmüller, of Chicago.

COLUMBUS MEMORIAL BUILDING.

